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German Patent DE 299 08 880 U 1

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A FOOD PREPARATION

The invention is about a food preparation in the form of a tablet that is soluble in liquids.

Known generic food preparations are, for instance, tablets that impart a certain flavour to liquids (*e.g.* lemonade tablets) or also sweetening dragées to sweeten hot drinks etc.

A preparation in the form of a tablet allows better dosage and storage, but this has been restricted until now primarily to sugar and sugar substitutes with, or without flavour additives.

Little is known about the preparation of other starting materials in tablet form. The main reason for this may be that sugar crystals and granulated sugar, with their own typical properties, can be made into tablets in a particularly simple way. This does not hold for other starting materials, or they would require costly pre-treatments. Another point is, of course, that other potential areas for application have not been associated at all with such preparations until now.

In this context, it is the objective of this invention to create a food preparation that can be used as a milk supplement in *e.g.* hot drinks without any problems and in a satisfactory way.

This objective is achieved with a food preparation according to claim 1. Preferred variants are given in the sub-claims.

It is intended, according to this invention, that the preparation that is soluble in liquids contains dried milk and/or cream powder in the form of a compressed tablet.

The ratio dried milk/cream powder may be varied, depending on the desired fat content. For common coffee cream for instance (10% fat content) the soluble tablet according to this invention could contain one part of cream powder (42% fat content) and three parts of dried milk. The fat content may be shifted by changing the cream powder/dried milk ratio without any problems towards 'pure cream' (increasing the cream powder fraction) or also towards 'light product' (reducing the cream powder fraction or increasing the dried milk fraction).

It would be sensible to use a milk/cream mixture as a base for making the tablet according to this invention that corresponds as to composition more or less to what is normally used in a cup (of coffee; translator).

It is possible, in principle, to form tablets that are storage-stable for a long time without addition of other ingredients by selecting appropriate pressure and/or temperature parameters during their manufacture.

The manufacture (of the tablet; translator) may also allow the addition of binding agents. All substances that are allowed in food products are suitable as binding agents, provided they hold the ingredients of the tablets according to this invention together after pressing. Sweet whey powder or dried glucose, for instance, are particularly suitable as binding agents.

In this context one could also think of designing the tablets in the form of dragées, *i.e.* to cover them with a sugar-containing coating. This would also lead to improvement of the storage properties.

Other ingredients can be added to the food preparation according to this invention as flavour components, if this would be desirable. One could think, for instance, of sugar in case a product is desired that sweetens and presents at the same time the addition of milk/cream to a hot drink. It is just as well possible to incorporate chocolate powder or other flavourful substances, when such a kind of flavour is desired.

Another way of making the product may involve the addition of a foam-generating substance to the tablet according to this invention. This could be one substance or a mixture of substances that liberate CO_2 in contact with an aqueous solution, *e.g.* a carbonate that decomposes to its gaseous components at higher temperatures. One could imagine the use of hartshorn salt (ammonium carbonate). Another idea would be the application of a mixture of *e.g.* bicarbonate and an acid, *e.g.* lactic acid or citric acid.

A tablet, created in this form, would generate a layer of milk foam when added to a hot drink (*e.g.* suitable for cappuccino). A foam stabiliser could also be incorporated in the tablet to stabilise the generated foam, *e.g.* chicken egg white.

An essential application target for the preparation according to this invention is its use as milk or cream equivalent in hot drinks, *e.g.* coffee, as is indicated above. The tablets according to this invention are therefore formed preferably in such a way that they dissolve relatively rapidly in hot drinks.

The tablet according to this invention represents an essential improvement, in particular in contrast with *e.g.* conventional coffee milk products and coffee whiteners. An essential advantage is, for instance, that the food products milk and cream are provided here in a preserved, pre-proportioned form, whereas in their natural form they go off very easily.

In this context, only so-called coffee whiteners were known until now. The known coffee whiteners consist of a powder of dried milk protein and they cannot be compared with the preparation according to this invention when it comes to flavour, etc. It was also not known to make the known coffee whiteners in the form of pre-proportioned tablets.

The tablets according to this invention can be stored in the same type of dispensers as, for instance, conventional sweetener tablets. A defined number of tablets can be added to hot drinks, *e.g.* coffee from such dispensers by pressing a button or by tipping.

Tablets that have been made according to this invention are therefore particularly suitable for use during camping, but also in canteen kitchens, catering, or in the area of vending machines. It is possible, without any problems, to keep a long-lasting stock, so that there is always a fully adequate milk/cream additive available, also when there is a sudden surprising demand. Another important advantage is that the coffee tablets according to this invention require clearly less packaging than the presently common, individually packed small coffee cream containers.

The invention will be explained more clearly by the following examples. They describe the manufacture of a tablet according to this invention as an equivalent for coffee milk.

Examples

Manufacture of a coffee cream tablet

One part of cream powder (42% fat, 20% protein, 28% lactose, 6% minerals, 4% H_2O) is blended homogeneously with 3 parts of dried milk (1% fat, 95% dry matter, 4% H_2O) and 0.5 parts of dried glucose. It is then processed in a tablet making machine at 160 bar [1] and room temperature to tablets of 2-3 g by weight. The tablets can be used immediately after manufacture and they can be stored, for instance, in dispensers.

A tablet to generate a 'milk' foam

0.5 Parts of a foam-generating substance (*e.g.* ammonium carbonate) and 0.2 parts of chicken egg white as foam stabiliser are added to the mixture of components described in example 1. The tablets are formed as indicated above.

CLAIMS

1. A food preparation in the form of a tablet that is soluble in liquids and that contains dried milk powder and/or cream powder.
2. A food preparation according to claim 1, where this contains sweet whey powder and/or dried glucose as binding agent.
3. A food preparation according to one of the claims 1 or 2, where this contains additional sugar or sugar substitutes.
4. A food preparation according to one of the claims 1 - 3, where this contains a foam-generating substance and, if necessary, a foam stabiliser.
5. A food preparation according to one of the claims 1 to 3, where the fractions of dried milk and/or cream powder per tablet correspond to the amounts of milk and cream that are commonly used in hot drinks.

(translation F.R.Visser, 1,200 words)

[1] 160 bar = 16 MPa; translator)